

[0206] One having ordinary skill in the art will readily understand that the invention as discussed above may be practiced with steps in a different order, and/or with hardware elements in configurations which are different than those which are disclosed. Therefore, although the invention has been described based upon these preferred embodiments, it would be apparent to those of skill in the art that certain modifications, variations, and alternative constructions would be apparent, while remaining within the spirit and scope of the invention. In order to determine the metes and bounds of the invention, therefore, reference should be made to the appended claims

We claim:

1. A network element, comprising:
 - at least one processor; and
 - at least one memory comprising computer program code, wherein the at least one memory and the computer program code configured, with the at least one processor, to cause the network element at least to transmit at least one of:
 - calculated impact information for a cell of the network element when taking an action related to a cell of the network element and/or when taking an action related to a cell of a second network element; and
 - a request for taking the action related to the cell of the second network element.
2. The network element of claim 1, wherein the action comprises at least one of:
 - muting the transmission
 - changing the on-duration,
 - reducing the transmit power, or
 - beamforming the transmission.
3. The network element of claim 1, wherein the impact information comprises benefit/penalty information.
4. The network element of claim 3, wherein the benefit/penalty information further comprises a list of elements, wherein each of the elements represents information about the benefit/penalty information relative to a set of resources.
5. The network element of claim 3, wherein the benefit/penalty information further comprises at least one of:
 - an amount of resources for the action;
 - an indication of specific frequency resources for the action;
 - an indication of specific frequency sub-band resource for the action;
 - an indication of beamforming coefficients;
 - an indication of specific time for the action; or
 - an indication of the duration for the action.
6. The network element of claim 1, wherein the at least one memory and the computer program code are further configured, with the at least one processor, to cause the network element at least to:
 - calculate a net benefit based on the calculated impact information; and
 - transmit the net benefit to the second network element.
7. The network element of claim 1, wherein the impact information comprises a priority factor.
8. The network element of claim 7, wherein priority factor is based on at least one of:
 - a congestion of a physical-downlink-control-channel/enhanced-physical-downlink-control-channel,
 - a use of range extension,
 - a channel type, and
 - Quality-of-Service characteristics of a data channel transmission.

9. A network element, comprising:

- at least one processor; and
- at least one memory comprising computer program code, wherein the at least one memory and the computer program code configured, with the at least one processor, to cause the network element at least to receive at least one of:
 - impact information for a cell of a second network element when taking an action related to the cell of the second network element, and/or when taking an action related to a cell of the network element;
 - a request from the second network element for taking an action related to a cell of the network element; and
 - a command from a central network element for taking an action related to a cell of the network element; and
 - take the action related to the cell of the network element based at least on one of the received impact information, the command, or the request.

10. The network element of claim 9, wherein the at least one memory and the computer program code are further configured, with the at least one processor, to cause the network element at least to:

- calculate a penalty/benefit for taking the action;
- calculate a net benefit based on the received impact information and the calculated penalty/benefit information; and
- determine whether to undertake the action based on the calculated net benefit.

11. The network element of claim 10, wherein the calculated net benefit is transmitted to at least one other network element.

12. The network element of claim 10, wherein the determining whether to undertake the action further comprises:

- receiving net benefit information from at least one other network element; and
- determining to undertake the action based on a comparison of the calculated net benefit and the net benefit information received from the at least one other network element.

13. The network element of claim 9, wherein the received impact information comprises benefit/penalty information.

14. The network element of claim 9, wherein the received impact information comprises a priority factor.

15. The network element of claim 14, wherein the priority factor is based on at least one of:

- a congestion of a physical-downlink-control-channel/enhanced-physical-downlink-control-channel,
- a use of range extension,
- a channel type, and
- Quality-of-Service characteristics of a data channel transmission.

16. A centralized network element, comprising:

- at least one processor; and
- at least one memory comprising computer program code, wherein the at least one memory and the computer program code configured, with the at least one processor, to cause the centralized network element at least to receive from a first network element at least one of:
 - impact information for a cell of the first network element when taking an action related to a cell of the first network element, or when taking an action related to a cell of a second network element, and